

FIG. 2A

INPUT TEXT EXAMPLE

	A sha no kogata bag A2O ha kaikou bu ga 30cm to kanari ookii. fasuna-no kaihei mo
TEYT 1	nameraka da. kawa no kanshoku wa shittori to yasashii.
5	smooth feel of leather moist soft
	(A20 is a small bag made by A company. The open top is rather wide, measuring 30 cm across. And, it is zipped and unzipped smoothly. The lerther gives moist and soft feel.)
	A20 wa kawa no tezawari ga odoroku hodo nameraka da. iroai mo shittori to yasashii.
TEXT 2	touch of leather ultra smooth coloring moist soft
-	(A20 is made in ultra smooth leather. The leather is dyed in moist and soft color.)

FIG. 2B VIEWPOINT AND DESCRIPTION IDENTIFICATION EXAMPLE

FIG. 20 ELEMENT METADATA EXTRACTION RESULT

iroai (coloring)	kawa no tezawari (touch of leather)	kawa no kanshoku (feel of leather)	fasuna-no kaihei (zipping and unzipping)	Kalkoubu (opell Lop)	baikanhu (anan tan)	VIEWPOINT
shittori to yasasii (moist and soft)	odoroku hodo mameraka da (ultora smooth)	shittori to yasasii (moist and soft)	nameraka da (smooth)	kanari ookii (rather wide)	30cm	DESCRIPTION
2-2	2-1	1-3	1-2	1-1b	1-1a	ELEMENT METADATA ID

VIEWPOINT/DESCRIPTION EXTRACTION RULE EXAMPLE

FIG. 3A

RULE	PATTERN	VIEWPOINT	DESCRIPTION
_	ha'({KANJI/HIRAGANA STRING 1})[`ga'`mo'] ({ALPHANUMERIC STRING 1})to' ({KANJI/HIRAGANA STRING 1} {ADJECTIVE ENDING 1})	\$1	\$2 \$3
2	ha´({KANJI/HIRAGANA STRING 1})[`ga´`mo´] ({KANJI/HIRAGANA STRING 1} {ADJECTIVAL NOUN ENDING 1})	\$1	\$2
3	ha´({KANJI/HIRAGANA STRING 1})[`ga´`mo´] ({KANJI/HIRAGANA STRING 1} {ADJECTIVE ENDING 1})	\$1	\$2
	TO POST OF MANY O		

EXPLANATION OF NOTATION OF RULE

[]:ANY IN TABLE +:REPETITION OF PATTERN ELEMENT IMMEDIATELY BEFORE ONCE OR MORE TIMES ():BACKWARD REFERENCE(SEQUENTIALLY REFERRED BY \$(INTEGER)) \$(INTEGER):VARIABLE (CHARACTER STRING MATCHED WITH{INTEGER}TH PART PARANTHISED BY "()"IN PATTERN

FIG. 3B

VIEWPOINT/DESCRIPTION EXTRACTION RULE COMPONENT DEFINITION EXAMPLE

`ku´`ka´`u´`yuu´`i´	ADJECTIVE ENDING 1
`daro´,`da´,`de´,`dat´,`ni´,`na´	ADJECTIVAL NOUN ENDING 1
[0-9A-z]+	ALPHANUMERIC STRING 1
string composed by any kanji/hiragana	KANJI/HIRAGANA STRING 1
DEFINITION	COMPONENT NAME

FIG. 4

METADATA INTEGRATION RESULT

VIEWPOINT DESCRIPTION 30cm kaikoubu (open top)	fasuna-no kaihei (zipping and unzipping)	fasuna-no kaihei (zipping and unzipp kawa no kanshoku	fasuna-no kaihei (zipping and unzipp kawa no kanshoku (feel ofleather)
5 2 1 28 1 25 1	i nameraka da oing) (smooth)		
	1-2	1-2	1-2 1-3 2-1
		shittori to yasasii (moist and soft)	shittori to yasasii (moist and soft) odoroku hodo mameraka da (ultora smooth)

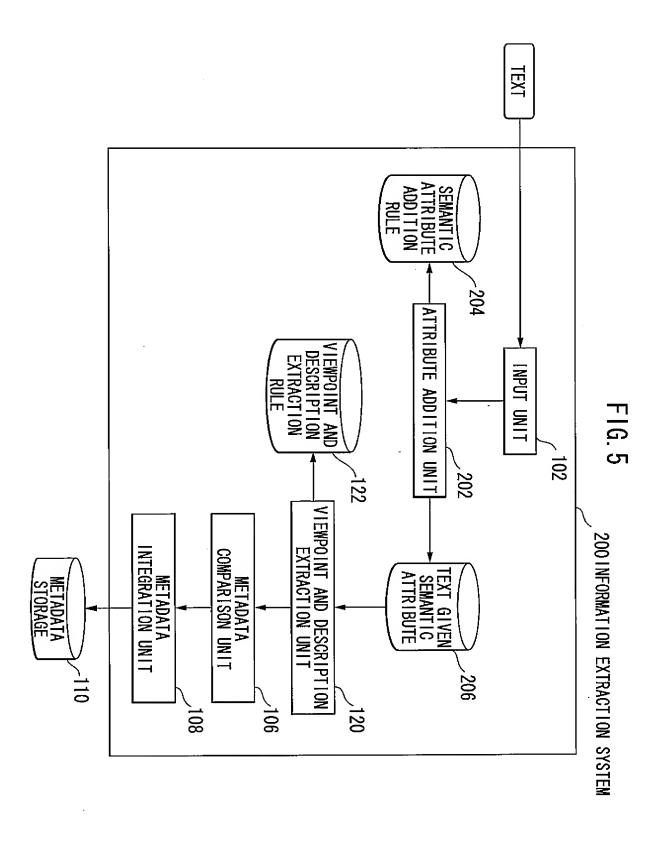


FIG. 6A

TEXT EXAMPLE

	TEXT 2	TEXT 1 /
(I think the capacity of the bag A200 is insufficient.)	bag A200 ha youryou ga hujuubunda to omou. bag A200 capacity	A sha no bag A200 ha youryou ga 20 rittoru to cokii. A company bag A200 capacity 20liters (The capacity of the bag A200 made by A company is as large as 20 liters.)

FIG. 6B

SEMANTIC ATTRIBUTE ADDITION EXAMPLE

TEXT 2 h	TEXT 1 <
TEXT 2 <prod_type>bag</prod_type> <prod_name>A-200</prod_name> ha <quant_type>youryou</quant_type> ga hujuubunda to omou.	<pre><organization type="company">A sha</organization> no <prod_type>bag<prod_name>ha<quant_type>youryou</quant_type>ga<quant unit="1," val="20"> 20rittoru</quant> to ookii.</prod_name></prod_type></pre>

FIG. 7A

SEMANTIC ATTRIBUTE ADDITION RULE EXAMPLE

		7	SE	SEMANTIC ATTRIBUTE
RULE	PATTERN	PART	SEMANTIC CLASSIFICATION	DETAILED INFORMATION
1	({NUMERIC STRING} {QUANTITY UNIT})	\$1 \$2	QUANT	unit:EXPRESSION IN UNITS OF QUANTITYval:VALUE ACQUIRED BY NORMALIZINGNUMERIC EXPRESSION
2	({QUANTITY CLASSIFICATION})	\$1	QUANT_TYPE	
ယ	({ALPHABETIC STRING} {EXPRESSION IMMEDIATELY FOLLOWING COMPANY NAME})	\$1	ORGANIZATION	• type:company
4	(PRODUCT CLASSIFICATION NAME)}	\$1	PROD_TYPE	
ហ	({PRODUCT CLASSIFICATION NAME} {ALPHANUMERIC SYMBOL STRING 1})	∽	PROD_NAME	

FIG. 7B SEMANTIC ATTRIBUTE ADDITION RULE COMPONENT DEFINITION EXAMPLE

ALPHANUMERIC SYMBOL STRING 1	ALPHABETIC STRING	NUMERIC STRING	PRODUCT CLASSIFICATION NAME	QUANTITY UNIT	QUANTITY CLASSIFICATION	EXPRESSION IMMEDIATERY FOLLOWING COMPANY NAME	COMPONENT NAME
[-0-9A-z] +	[A-Z] +	[0-9] +	`bag´,`shoes´,`bousi(hat)´	`liter´,`meter´,`gram´	your you (capacity)	sha (company)	DEFINITION

FIG. 8A

EXAMPLE OF TEXT GIVEN SEMANTIC ATTRIBUTE

TEXT 2 h	TEXT 1 <
<prod_type>bag</prod_type> <prod_name>A-200<prod_name> ha<quant_type>youryou</quant_type> ga hujuubunda to omou.</prod_name></prod_name>	<pre><organization type="company">A sha</organization> no <prod_type>bag</prod_type><prod_name>A200 </prod_name>ha<quant_type>youryou</quant_type>ga<quant unit="1,val=20"> 20rittoru</quant> to ookii.</pre>

FIG. 8B

VIEWPOINT AND DESCRIPTION IDENTIFICATION EXAMPLE

TEXT 2	ТЕХТ 1
<pre><desc1><prod_type>bag</prod_type></desc1><desc2><prod_name>A-200</prod_name> ha<quant_type>youryou</quant_type> ga <desc3> hujuubunda to omou.</desc3></desc2></pre>	<pre><desc1><organization type="company">A sha</organization></desc1> no <desc2><prod_type>bag </prod_type></desc2><desc3><prod_name>A200</prod_name></desc3>ha<view4><quant_type>youryou </quant_type></view4>ga<desc4a><quant_unit=1, val="20">20 rittoru</quant_unit=1,></desc4a> to ookii.</pre>

VIEWPOINT/DESCRIPTION EXTRACTION RULE EXAMPLE

\neg
<u>.</u>
•
9
⋝

QUANT_TYPE>({ARBITRARY CHARACTER STRING EXCEPT TAG START SYMBOL}) <pre> QUANT_TYPE>({ARBITRARY CHARACTER STRING EXCEPT TAG START SYMBOL})</pre> CHARACTER STRING EXCEPT TAG START SYMBOL}) (ARBITRARY CHARACTER STRING EXCEPT TAG START SYMBOL)) (ARBITRARY CHARACTER STRING EXCEPT TAG START SYMBOL)> (ARBITRARY CHARACTER EXCEPT TAG END SYMBOL)* (ARBITRARY CHARACTER STRING EXCEPT TAG START SYMBOL)>> (ARIAS OF SEMANTIC ATTRIBUTE 1)>> (ARIAS OF SEMANTIC ARIAS OF SEMANTIC

+: REPEATING PATTERN ELEMENT IMMEDIATELY BEFORE I TIMES OR MORE *: REPEATING PATTERN ELEMENT IMMEDIATELY BEFORE O TIMES OR MORE FIG. 9B VIEWPOINT/DESCRIPTION EXTRACTION RULE COMPONENT DEFINITION EXAMPLE

END TAG	ARBITRARY CHARACTER STRING EXCEPT TAG END SYMBOL 1	ARBITRARY CHARACTER STRING EXCEPT TAG START SYMBOL 1	SEMANTIC ATTRIBUTE 1	ADJECTIVE ENDING 1	ADJECTIVE VERB ENDING 1	COMPONENT NAME
\(\(\cappa_1\)		+0~1	ORGANIZATION'、ORGANIZATION type company' 'PROD_TYPE'、'PROD_NAME'、 'PERSON'、'DATE'、'TIME'、'PERIOD'、···	`ku´,`ka´,`u´,`yuu´,`i´	`daro´,`da´,`de´,`da´,`ni´,`na´	DEFINITION

FIG. 10

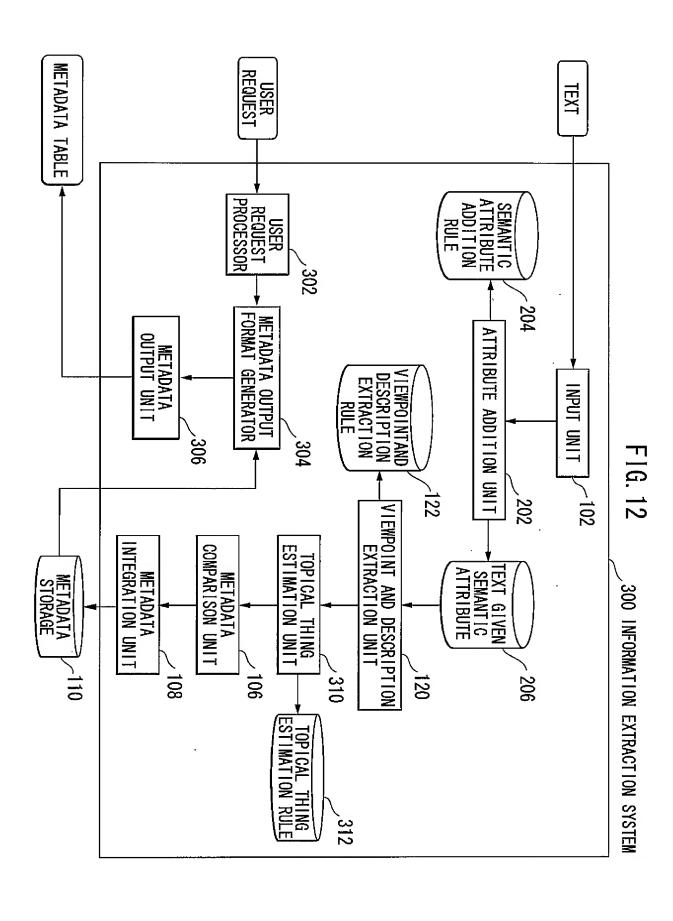
ELEMENT METADATA EXTRACTION RESULT

CAPACITY	OADAO TV	PRODUCT NAME	PRODUCT CLASSIFICATION		CAPACITY		PRODUCT NAME	PRODUCT CLASSIFICATION	COMPANY NAME	VIEWPOINI	
hujuubun dα		A-200	bag	ookii	20 rittoru		A-200	bag	A sha	DESCRIPTION	
	QUANT_TYPE	PROD_NAME	PROD_TYPE		QUANT	QUANT_TYPE	PROD_NAME	PROD_TYPE	ORGANIZATION type=company	SEMANTIC DETAILED CLASSIFICATION INFORMATION	SEMANT I C
					unit=1, val=20 1-4a				type=company	DETAILED INFORMATION	SEMANTIC ATTRIBUTE
۲ ر	う - 2	2-2	2-1	1-4b	1-4a	ı	1-3	1-2	1-1	METADATA ID	ELEMENT

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METADATA INTEGRATION RESULT

2-3			hujuubun:da	
1-4b		-	ook i i	יין אין
1-4a	unit=1, val=20 1-4a	QUANT	20 rittoru	CADACITY
ı		GUANT_TYPE		
1-3 2-2		PROD_NAME	A-200	PRODUCT NAME
1-2 2-1		PROD_TYPE	bag	PRODUCT CLASSIFICATION
1-1	type=company	ORGANIZATION	A sha	COMPANY NAME
METADATA ID	DETAILED INFORMATION	SEMANTIC DETAILED CLASSIFICATION INFORMATION	DESCRIPTION	VIEWPOINT
ELEMENT	SEMANTIC ATTRIBUTE	SEMANTIC		



A81.9I7

10	
COURNT UNIT= Val=30>30 hittoruc/QUANT> <td></td>	
TYPE> YOUNYOU CIVIEW 6> ha CVIEWT)	
H300 < LDROD-NAME> no < VIEW b> < QUANT-	
CLOUMNTS < IDESC & SPECC & SPROD-TYPES DAG	
CIVIEW 3> ga CDESC3> COUANT UNITE! VAI=20> 20 MITCH	71401
ha CVIEW3>CQUANT_TYPE>YOUYYOUC/QUANT_TYPE>	16TX-7T
CDESCS> CBKOD-NAME> 4500 C/BKOD-NAME> C/DESCS)	
CDESCT> < DESCT> < DBOD-LLGE> PUB < / LGBOD-LLGE> < / DESCT>	ļ
CIVIEWA>,	I I
CLOUANT_TYPE>CIVIEW 6> ga CVIEW 7> amanini ookii	
NAME> ha < VIEW 6> < QUANT_TYPE> YOUNYOU	
TYPE> <desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><desca><de< td=""><td></td></de<></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca></desca>	
PUNDASh; <desc4><prod_type> bag <td></td></prod_type></desc4>	
CPRUD_NAME>A 200 <ndesc2> ha < DESC 3> HUJUU TYPE>YOU'YOU <!-- QUANT_TYPE--><ntew 3=""> ga < DESC 3> HuJUU</ntew></ndesc2>	111731
THALLOY Z CWETLY NA ZE 22 EGA N Z EMAN _ COST V Z MAN _ COST V Z MAN _ COST V Z	1 1 7 1 1 2 2 2
COCOCT CLKNO-116CD DUB CPRODE TRAFORDESCIDENCES	
<pre><desci><prod_type> bag <prod_type></prod_type></prod_type></desci></pre>	

FIG. 13B
ELEMENT METADATA EXTRACTION RESULT EXAMPLE

9-7	,l=tinu 0&=1ev	TNAUQ	30 hìttoru	CAPACITY
		ATT_TNAUD		
7–2		PROD_NAME	00£A	PRODUCT NAME
7-7		PROD_TYPE	৪४৭	PRODUCT CLASSIFICATION
2–3	,f=1inu val=20	TNAUQ	20 rittonu	YTI0A9A0
		QUANT_TYPE		
7-7		PROD_NAME	002A	PRODUCT NAME
7-7		PROD_TYPE	Pag	PRODUCT CLASSIFICATION
			nárini ookit	CAPACITY AN
9-1		ATT TNAUD		
9-1		PROD_NAME	00£A	PRODUCT NAME
7-1		PROD_TYPE		PRODUCT CLASSIFICATION
			p brud uv turd a	CAPACITY
{ ε−ι		39YT_TNAU0		, , , , , , , , , , , , , , , , , , ,
1-2		PROD_NAME	00SA	PRODUCT NAME
1-1		PROD_TYPE	ઉષ્વ	PRODUCT CLASSIFICATION
ATADATA QI	INFORMATION	SEMANTIC CLASSIFICATION	DESCRIPTION	VIEWPOINT
ELEMENT	EXECUTE STREET	SEMANTIC		

FIG. 14A

TOPICAL THING ESTIMATION RULE EXAMPLE

RULE	CONDITION	ESTIMATED TOPICAL THING
_	<pre><desc[0-9]+><{PROD_TYPE PERSON}>({ARBITRARY CHARACTER STRING EXCEPT TAG START SYMBOL} <{PROD_TYPE PERSON}></desc[0-9]+></pre>	TOPICAL THING OF ELEMENT METADATA OF DESCRIPTION \$1:\$1
2	({ARBITRARY CHARACTER STRING EXCEPT TAG START SYMBOL}) <pre>SYMBOL})</pre> <pre>({PROD TYPE PERSON}>"HA" (<view[0-9]+><{ARBITRARY CHARACTER STRING EXCEPT TAG START SYMBOL}><view[0-9]+> "GA"<{ARBITRARY CHARACTER STRING EXCEPT TAG START SYMBOL}) HOWEVER, CHARACTER STRING IN \$2 AND \$4, IN \$5 AND \$7 SHALL BE IDENTICAL</view[0-9]+></view[0-9]+></pre>	TOPICAL THING OF ELEMENT METADATA OF VIEWPOINT \$3 AND DESCRIPTION \$6:\$1
ω	({ARBITRARY CHARACTER STRING EXCEPT TAG START SYMBOL}) {PROD_TYPE PERSON} <desc[0-9]±><{PROD TYPE PERSON}> <{ARBITRARY CHARACTER STRING EXCEPT TAG START SYMBOL}><!-- {PROD_TYPE PERSON}--></desc[0-9]±>	TOPICAL THING OF ELEMENT METADATA OF DESCRIPTION \$2:\$4

EXPLANATION OF NOTATION OF RULE (A|B): ONE OF A AND B

FIG. 14B

TOPICAL THING ESTIMATION RULE COMPONENT DEFINITION EXAMPLE

- -	ARBITRARY CHARACTER STRING
RING [0-9A-Za-z_]+	TAG CONFIGURATION CHARACTER STRING
DEFINITION	COMPONENT NAME

TOPICAL THING ESTIMATION EXAMPLE

FIG. 15

2-6	unit=1, val=30	QUANT	30 rittoru	CAPACITY
		QUANT_TYPE		
 2-5		PROD_NAME	A300	PRODUCT NAME
 2-4		PROD_TYPE	bag	PRODUCT CLASSIFICATION
 2-3	un i t=1, va i =20	QUANT	20 rittoru	CAPACITY
))		QUANT_TYPE		
2-2		PROD_NAME	A200	PRODUCT NAME
2-1		PROD_TYPE	bag	PRODUCT CLASSIFICATION
0-1			amarini ookii	
 J 6		QUANT_TYPE		CADACITY
1-5		PROD_NAME	A300	PRODUCT NAME
1-4		PROD_TYPE	bag	PRODUCT CLASSIFICATION
			hujuubunda	ייין דיסגן
1-3		QUANT_TYPE		CADACITY
1-2		PROD_NAME	A200	PRODUCT NAME
1-1		PROD_TYPE	bag	PRODUCT CLASSIFICATION
METADATA ID	DETAILED INFORMATION	SEMANTIC GLASSIFICATION	DESCRIPTION	VIEWPOINT
EL EMENT		SEMANTIC ATTRIBUTE		

F1G. 16

INTEGRATION RESULT EXAMPLE

		7000	A200			ESTIMATION EXAMPLE	TOPICAL THING				
סטן מסדו	CAPACITY	1	PRODUCT NAME	PRODUCT CLASSIFICATION		CAPACITY		PRODUCT NAME	PRODUCT CLASSIFICATION	VIEWPOINI	
30 rittoru	amarini ookii		A300	bag	20 rittoru	hujuubunda		A200	bag	DESCRIPTION	7
QUANT		QUANT_TYPE	PROD_NAME	PROD_TYPE	QUANT		QUANT_TYPE	PROD_NAME	PROD_TYPE	SEMANTIC CLASSIFICATION	SEMANTIC ATTRI
unit=1, val=30					unit=1, val=20					DETAILED INFORMATION	BUTE
2–6	1-6	_	1-5 2-5	1-4 2-4	2–3	1-3	-	1-2 2-2	1-1 2-1	METADATA ID	ELEMENT

FIG. 17

INTEGRATION RESULT EXAMPLE

2-3	unit=1, val=20	QUANT	20 rittoru		
1-3			hujuubunda	CAPACITY	A200
_		QUANT_TYPE	<u> </u>		
METADATA ID	DETAILED INFORMATION	SEMANTIC DETAILED CLASSIFICATION INFORMATION	DESCRIPTION	VIEWPOINT	ESTIMATION EXAMPLE
ELEMENT	TTRIBUTE	SEMANTIC ATTRIBU			TODICAL THING

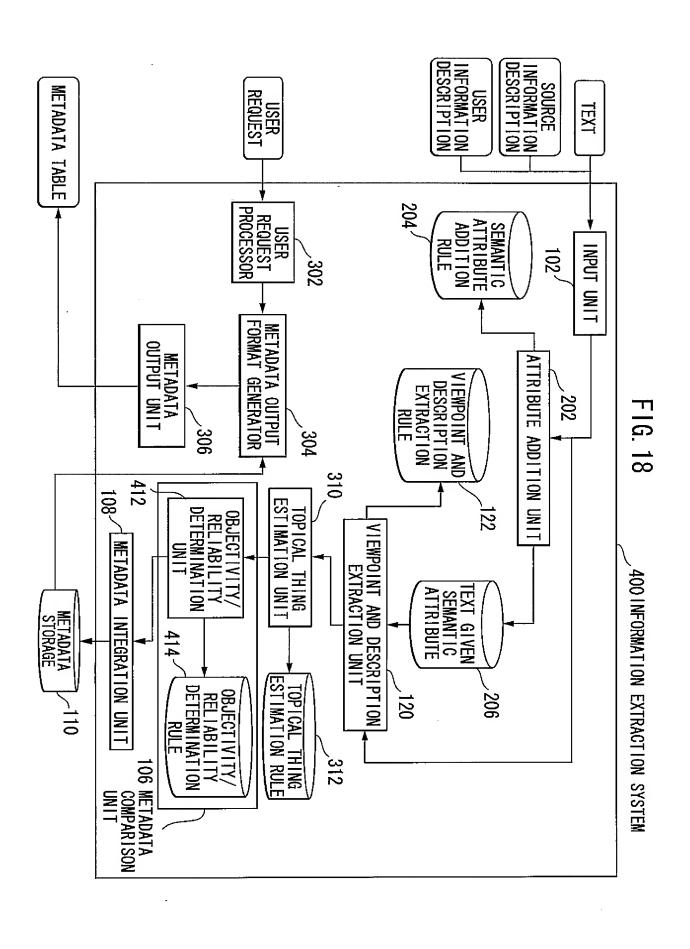


FIG. 19A

SOURCE INFORMATION DESCRIPTION EXAMPLE

http://www.xxx.yyy.jp/~zzz CREATION DATE:MAY.1,2003	SOURCE INFORMATION DESCRIPTION 2
http://www.aaa.co.jp/articlel CREATION DATE:OCT.1,2003	SOURCE INFORMATION DESCRIPTION 1

FIG. 19B

USER INFORMATION DESCRIPTION EXAMPLE

AUTHOR ZZZ MALE IN TWENTIES	USER INFORMATION DESCRIPTION 2
COMPANY NAME:aaa	USER INFORMATION DESCRIPTION 1

FIG. 190

EXAMPLE OF SOURCE INFORMATION DESCRIPTION WITH SEMANTIC ATTRIBUTE

FIG. 19D

EXAMPLE OF USER INFORMATION DESCRIPTION WITH SEMANTIC ATTRIBUTE

DESCRIPTION 1	USER INFORMATION
ര്	AUTHOR <author>zzz<!--/AUTHOR-->。<agevalue=20:29>TWENTIES</agevalue=20:29></author>

SOURCE SEMANTIC ATTRIBUTE ADDITION RULE EXAMPLE

FIG. 20A

value=\$1:\$2:\$3 HOWEVER, PUT O BEFORE WHEN \$2 AND \$3 ARE ONE DIGIT	DATE	({4-DIGIT NUMERIC CHARACTER})YEAR ({1 TO 2-DIGIT NUMERIC CHARACTER})MONTH ({1 TO 2-DIGIT NUMERIC CHARACTER})	2
type=company	URL (WEB PAGE)	(http://.*\.cc\jp.*)	
DETAILED INFORMATION	SEMANTIC GLASSIFICATION	PATTERN	RULE
SEMANTIC ATTRIBUTE	SEM		

¥:"." (PERIOD)

FIG. 20B USER SEMANTIC ATTRIBUTE ADDITION RULE EXAMPLE

	GENDER	MALE	ယ
	0 AGE	({1-DIGIT NUMERIC CHARACTER})AGE OF O	2
	AUTHOR	AUTHOR[:]*([^.]+)	
ION	SEMANTIC CLASSIFICATION	PATTERN	RULE
SEMANTI			

[^.]: CHARACTER UNMATCHED WITH CHARACTER IN TABLE

SOURCE VIEWPOINT/DESCRIPTION EXTRACTION RULE EXAMPLE

FIG. 21A

FIG. 21B

USER VIEWPOINT/DESCRIPTION EXTRACTION RULE EXAMPLE

3	2	_	RULE
<pre><gender type="M">({ARBITRARY CHARACTER STRING EXCEPT TAG START SYMBOL})</gender></pre> /GENDER>	<agevalue=(20:29)>({ARBITRARY CHARACTER STRING EXCEPT TAG START SYMBOL})</agevalue=(20:29)>	<pre><author>({ARBITRARY CHARACTER STRING EXCEPT TAG START SYMBOL})</author></pre>	PATTERN
GENDER	AGE	AUTHOR	VIEWPOINT
MALE	<u>\$1</u>	\$1	DESCRIPTION

FIG. 22A SOURCE METADATA EXTRACTION RESULT EXAMPLE

1-\$3	value=2003:10:01	DATE	0CT. 1, 2003	CREATION DATE
1-82	type=company	URL (WEB PAGE)	ASSIFICATION CORPORATE WEB PAGE OF TEXT (http://www.aaa.co.jp/articlel)	CLASSIFICATION OF TEXT
1-\$1	type=company	URL (WEB PAGE)	http://www.aaa.co.jp/articlel	SOURCE OF TEXT
METADATA ID	DETAILED INFORMATION	SEMANTIC CLASSIFICATION	DESCRIPTION	VIEWPOINT
200100		SEMANTIC ATTRIBUTE		

FIG. 22B USER METADATA EXTRACTION RESULT EXAMPLE

2-U3	value=M	GENDER	MALE	GENDER
2-U2	value=20:29	AGE	20-29	AGE
2-U1		AUTHOR	222	AUTHOR
METADATA ID	DETAILED INFORMATION	SEMANTIC CLASSIFICATION	DESCRIPTION	VIEWPOINT
		SEMANTIC ATTRIBUTE		- 95

OBJECTIVITY/RELIABILITY DETERMINATION RULE EXAMPLE FIG. 23

	5	9	8	7	6	σī	4	ω	2		, , , , , , , , , , , , , , , , , , ,	ZD E	-
ON ICCUTIVITY OF TEXT EXCEPT QUANT OF TEXT PERSUNAL WEB PAGE	CADACITY	CAPACITY	CAPACITY	CAPACITY	CAPACITY	USAGE	USAGE	PRODUCT NAME	PRODUCT CLASSIFICATION	ORGANIZATION NAME	VIEWPOINT	ELEMENT META	
EXCEPT QUANT	NONE OR	NONE OR EXCEPT QUANT	NONE OR EXCEPT QUANT	QUANT	QUANT	USAGE	USAGE		5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5		SEMANTIC CLASSIFICATION OF DESCRIPTION	ELEMENT METADATA OF TEXT	
OF TEXT		CLASSIFICATION OF TEXT		CLASSIFICATION OF TEXT	CLASSIFICATION OF TEXT	CLASSIFICATION OF TEXT	CLASSIFICATION OF TEXT				VIEWPOINT	SOURCE	CONDITION
PERSONAL WEB PAGE	חבחפסאואו ואודה האסר	CLASSIFICATION CORPORATE WEB PAGE/		PERSONAL WEB PAGE	CLASSIFICATION CORPORATE WEB PAGE/	PERSONAL WEB PAGE	CORPORATE WEB PAGE/ NEWSPAPER				DESCRIPTION	SOURCE METADATA	
EXCEPT (INDEFINITE EXPRESSION	ENDING OF SENTENCE IS	EXCEPT (INDEFINITE EXPRESSION	ENDING OF SENTENCE IS [INDEFINITE EXPRESSION]								OTHERS		
<u> </u>	-	0	0		_	0		_		_	YTIVIT	ΊΕC	OB
<u>0</u>	2	0.5	0.2	0.9	_	0.5		-		_	BILITY	∀ I⊓	BE

OBJECTIVITY/RELIABILITY DETERMINATION RULE COMPONENT DEFINITION EXAMPLE INDEFINITE EXPRESSION 1:THINK, SEEM, COBSIDERED, MAY, LIKLY

A 12. DIT

TEXT EXAMPLS

Bag A200 ha youyruou ga 2<u>0 rittoru</u> to ookii. bag A200 capacity 20 liters

TEXT1

(The capacity of the bag A200 is as large as 20 liters.)

Bag A200 no youryou ha kaigai syuttyouyou ni ha hujuubunnda

bag A200 capacity for overseas business trip insufficient

to omou.

think

STX3T

TEXT3

(I think the capacity of bag A200 is insufficient for overseas business trip.)

Bag A200 no youryou ha kokunai syuttyouyou ni ha amarini too

<u>ookii</u>.

large

(The capacity of bag A200 is too large for domestic business

trip.)

Bag A200 no youryou ha kokunai syuttyouyou ni ha iuubunnda.

TEXTA

(The capacity of bag A200 is sufficient for domestic business

(rip.)

sufficient

FIG. 24B

EXAMPLES OF TEXT GIVEN SEMANTIC ATTRIBUTE

TEXT 1 | bag</PROD_TYPE><PROD_NAME>Azoo</PROD_NAME>ha<QUANT_TYPE> CORGANIZATION type=company> A sha/orGANIZATION> no CORGANIZATION> ga<auANT unit=1, va =20>20 rittoru</auANT> to ookii.

TEXT 2 |NT_TYPE>Xouryou</QUANT_TYPE>ha<USAGE>kaigaisyuttyouyou</usa GE>ni ha hujuubunda to omou. <PROD_TYPE>bag</prod_TYPE><PROD_NAME>A200/PROD_NAME>no<QUA</pre>

TEXT 3 |T_TYPE>Youryou</QUANT_TYPE>ha<USAGE>kokunaisyuttyouyou</Usage> ni ha amarini ookii. <PROD_TYPE>bag</PROD_TYPE><PROD_NAME>AZOO</PROD_NAME>no<QUAN

TEXT4 |TYPE> Youryou</QUANT_TYPE> ha< USA 9E>kokunaisyuttyouyou</usage> <PROD_TYPE>bag_TYPE><PROD_TYPE><PROD_NAME>A200_NAME>no<QUANT_</pre> ni ha juubunda.

FIG. 25A VIEWPOINT/DESCRIPTION EXTRACTION RULE EXAMPLE

RULE 1	PATTERNVIE <quant_type>(<arbitrary character="" except="" start="" string="" symbol="" tag="">) (</arbitrary></quant_type>) [ga OR ha] <quant>(<arbitrary character="" except="" start="" string="" symbol="" tag="">) EXCEPT TAG START SYMBOL>)</arbitrary></quant>
2	<pre><quant_type>(<arbitrary character="" except="" start="" string="" symbol="" tag="">) (</arbitrary></quant_type>)[ga OR ha]<usage>(FOR <arbitrary character="" except="" start="" string="" symbol="" tag="">)</arbitrary></usage></pre>
	<pre>{/USGE>(hiltosite) [haOR mo] ({KANJI/HIRAGANA STRING 1} {ADJECTIVE ENDING 1})</pre>
ω	<pre><quant_type>(<arbitrary character="" except="" start="" string="" symbol="" tag="">) (</arbitrary></quant_type>) [ga</pre>
	{ARBITRARY CHARACTER STRING EXCEPT TAG TRAILING SYMBOL}*
4	({ARBITRARY CHARACTER STRING EXCEPT TAG START SYMBOL}) {SEMANTIC ATTRIBUTE 1}
5	[TRAILING TAG]<([SEMANTIC ATTRIBUTE 1])><([ARBITRARY CHARACTER STRING EXCEPT TAG START SYMBOL])> [SEMANTIC ATTRIBUTE 1]

FIG. 25B VIEWPOINT/DESCRIPTION EXTRACTION RULE COMPONENT DEFINITION EXAMPLE

END TAG	ATTRIBUTE CHARACTER EXCEPT TAG END SYMBOL	COMPONENT NAME
<+[<^]+>	[<,]	DEFINITION

FIG. 26

ELEMENT METADATA EXTRACTION RESULT EXAMPLE

A-200	4-4		USAGE	kokunaisyuttyouyou	USAGE
			1	JUU BUN da	
A-200	4-3		USAGE	kokunaisyutt <i>youyou</i>	CAPACITY
			QUANT_TYPE		
A-200	4-2		PROD_NAME	A200	PRODUCT NAME
A-200	4-1		PROD_TYPE	bag	PRODUCT CLASSIFICATION
A-200	3-4		USAGE	kokunaisyuttyouyou	USAGE
			ı	amariniookii	
A-200	ω -ω		USAGE	kokunai syuttyou you	CAPACITY
			QUANT_TYPE		
A-200	3-2		PROD_NAME	A200	PRODUCT NAME
A-200	3-1		PROD_TYPE	608	PRODUCT GLASSIFICATION
A-200	2-4		USAGE	kaigaisyuttyouyou	^
			1	hujuubun da	
A-200	2-3		USAGE	Kaigaisyuttyou you	CAPACITY
			QUANT_TYPE		
A-200	2-2		PROD_NAME	A200	PRODUCT NAME
A-200	2-1		PROD_TYPE	bag	PRODUCT GLASSIFICATION
	1-3b		ı	00 Kîî	
A-200	1-3a	unit=1, val=20	QUANT	20 rittoru	CAPACITY
	ı		QUANT_TYPE		
A-200	1-2		PROD_NAME	A200	PRODUCT NAME
A-200			PROD_TYPE	Pag	PRODUCT CLASSIFICATION
THING	METADATA ID	DETAILED INFORMATION	SEMANTIC CLASSIFICATION	DESCRIPTION	VIEWPOINI
TODICAL	EI EMENT	TRIBUTE	SEMANTIC ATTRI		
				באוומיסו בסוד ולבססבו באאווו בב	

FIG. 27
OBJECTIVITY/RELIABILITY DETERMINATION RESULT EXAMPLE ELEMENT METADATA

USAGE Kokunaisyuttyouyou	ĵυυbυn da	CAPACITY KOKUNA SYUTTYOUYOU		PRODUCT NAME A200 P	CLASSIFICATION bag	USAGE KOKUNAISYUttyouyou	amarini ookii	CAPACITY kokunaisyuttyouyou	9	PRODUCT NAME A200 P	PRODUCT CLASSIFICATION 609 1	USAGE Kaigaisyuttyouyou	hujuubun da	CAPACITY kaigaisyuttyouyou		PRODUCT NAME A200 P	PRODUCT CLASSIFICATION 609 1	00Kiì	CAPACITY 20 rittoru		PRODUCT NAME A200 F	PRODUCT CLASSIFICATION 609	/IEWPOINT DESCRIPTION	ELEMENI METADATA
USAGE	1	USAGE	QUANT_TYPE	PROD_NAME	PROD_TYPE	USAGE	ı	USAGE	QUANT_TYPE	PROD_NAME	PROD_TYPE	USAGE	1	USAGE	QUANT_TYPE	PROD_NAME	PROD_TYPE	ı	QUANT	QUANT_TYPE	PROD_NAME	PROD_TYPE	SEMANTIC ATTRIBUTE N	ADATA
4-4	ح 1	<u>4</u> -3	1	4-2	4-1	3-4	c	2	1	3-2	3-1	2-4	7	၁ 	ı	2-2	2-1	1~3b	1-3a	ľ	1-2	1-1	ELEMENT OF THE PROPERTY OF THE	
0	_	>		1.0	1.0	0	<	>		1.0	1.0	0	•	>	-	1.0	1.0	0	1.0	-	1.0	1.0	BJEC-	
0.5	ر.			<u>1</u> .0	1.0	0. 5	ر. د	ာ ၁		1. 0	1.0	0. 5	0. 2	ი ა		1. 0	1.0	0.5	1.0	_	1.0	1.0	RELI- ABILITY	
													1	_EX	L∃	0 1	101	TA:	ΕIC	ISS	5 ∀ T	ე	VIEW- POINT	SOL
	<u>י</u> ך	ANC DAG	B B B2C	ME BE				A <i>N</i> 0						,00; Aq				=	NX Age		MEE COM		DESCRIP -TION	URCE ME
		4-02	S					3-52	8					7	9 <u>-</u> C9					1-82			SOURCE METADATA ID	METADATA
																			ਬ	IDEI	GEV		VIEW- POINT	
	•		<u>\$</u> ≥					FEMALE						MALE	<u> </u>					I			DESCRIP -TION	USER MET/
		- 1 -	/ <u>- </u> 2					3-U3						2-U3	5					1			USER METADATA ID	METADATA

FIG. 28

TOPICAL THING METADATA INTEGRATION RESULT EXAMPLE A200 PRODUCT CLASSIFICATION CAPACITY PRODUCT NAME VIEWPOINT <u>juubun da</u> kaigaisyutty*ouyou* Kaigaisyuttyouyou <u>amarini ooki</u> <u>kokunaisyuttyouyou</u> nujuubun da kokunaisyutt*youyou* 00 Kii 20 rittoru DESCRIPTION **ELEMENT METADATA** bag A200 SEMANTIC ATTRIBUTE QUANT_TYPE PROD_NAME PROD_TYPE USAGE USAGE USAGE QUANT USAGE ELEMENT METADATA ID

2-2

1.0

1.0

PERSONAL WEB PAGE

3-S2 4-S2

FEMALE

3-03 2-U3

MALE

MALE

4-U3

2-82

1-2

CLASSIFICATION OF TEXT

COMPANY WEB PAGE

1-82

1

4-2 3-2

ı

2-1

1.0

1.0

PERSONAL WEB PAGE

2-S2 3-S2

FEMALE

3**–**U3 2-U3

MALE

4-03

CENDER

MALE

4-S2

工

COMPANY WEB PAGE

1-82

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OBJEC-

- RELI-ABILITY

POINT

DESCRIP -TION

SOURCE METADATA ID

POINT

DESCRIP -TION

USER METADATA

SOURCE METADATA

USER METADATA

<u>ယ</u>

4-1

USAGE

|kokunaisyuttyouyou

USAGE

ယ ယ 2-4

0

0

<u>.</u>

PERSONAL WEB PAGE

2-S2 4-S2

FEMALE

3-U3 2-U3

4-U3

MALE

4-3

0

9

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4-S2

MALE

4-U3

4-4

2-3

0

0.2

2-82

MALE

2-U3

1-3a

1 - 3b

0

0.5

COMPANY WEB PAGE

1-82

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1

1.0

<u>ယ</u> ယ

0

9

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PERSONAL WEB PAGE

3-82

FEMALE

3-03

FIG. 29

METADATA TABLE

			ELEMENT METADATA	TADATA				SOL	SOURCE METADATA	ADATA	N	USER METADATA	ADATA
TOPICAL VIEWPOINT	VIEWPO	TNI	DESCRIPTION	SEMANTIC ELEMENT OBJEC- RELI- VII ATTRIBUTE METADATA TIVITY ABILITY PO	ELEMENT METADATA ID	OBJEC-	RELI- ABILITY	VIEW- POINT	DESCRIP -TION	EW- DESCRIP SOURCE VIEW- DESCRIF	VIEW- POINT	DESCRIP -TION	USER METADATA ID
	CAPACITY	Υ.		QUANT_TYPE	1	ı	ı	10	ld		9	1	
	~-	aigai	kaigai syuttyouyou	USAGE	ა ა	>	၁ ၁	SSA_	ERSC	8	END	2	5
		າ <i>ພູ່ບຸບ</i>	hujuubun da	t	٥-7	•	٥.	IHI	JAN	2-52	ЕВ	MALE	2-03
	~	(okun	kokunaisyuttyouyou	USAGE	ည 	>	ი ა	TAO	EWE	8		1	5
A200	0	marit	amarini ookii	-	c	•	٥. ٥	NOI	9 B	3-82		FEMALE	3-03
	₹.	(OKUN	kokunaisyuttyouyou	USAGE	A	>	ა ა	∃0	AGE	3		7	5
		juubi	juubun da	_	41 0	_	٥. ن	(3T	_	4-82		MALE	4-03
	~	aigai	kaigaisyuttyouyou	USAGE	2-4			1)		2-S2		MALE	2-U3
	USAGE L		Labunaiswittvallvall	IISAGE	3-4	0	0.5			3–\$2	<i></i>	FEMALE	3 - U3
		7	012/00/00/00	00.10	4-4				**-	4-\$2		MALE	403